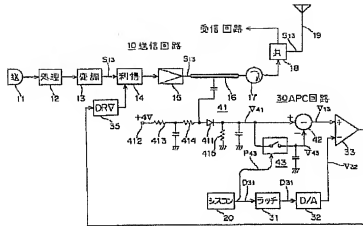


## REMARKS

In the final office action mailed on December 5, 2006, claims 1, 3, 7 and 10 were rejected under 35 U.S.C. §102(b) over Japanese Patent document JP 06-177,680 (to Hideaki and referred to in the office action as Yukio et al.), claims 15, 20 and 21 were rejected under §102(b) over Hideaki in view of U.S. Patent No. 5,054,116 (to Davidson), claim 2 was rejected under 35 U.S.C. §103(a) over Hideaki in view of U.S. Patent No. 6,566,944 (to Pehlke et al.), claim 4 was rejected under §103(a) over Hideaki in view of U.S. Patent No. 6,617,930 (to Nitta), claim 5 was rejected under §103(a) over Hideaki in view of U.S. Patent No. 6,795,712 (to Vakilian et al.), claim 6 was rejected under §103(a) over Hideaki in view of U.S. Patent No. 6,144,860 (to Komatsu), claim 11 was rejected was rejected under §103(a) over Hideaki in view of U.S. Patent Appln. Pub. No. 2004/0166802 (to McKay Sr. et al.), claim 16 was rejected under §103(a) over Hideaki in view of Davidson and further in view of U.S. Patent No. 5,656,929 (to Humpherys), claim 17 was rejected under §103(a) over Davidson in view of Nitta, claim 18 was rejected under §103(a) over Hideaki in view of Davidson and in view of Vakilian, claim 19 was rejected under §103(a) over Davidson in view of Hideaki. Claims 12 – 14 were allowed.

Independent claim 1 therefore, was rejected over the Hideaki reference, and independent claim 15 was rejected over a combination of Hideaki and Davidson.

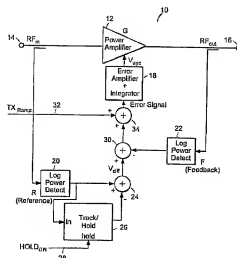
The Hideaki reference discloses a transmitter that includes a power amplifier 15 that is controlled by gain control circuit 14 that receives a feedback signal. The transmitter also includes an envelope detector circuit 41 and a sampling and hold circuit 43 that provide the feedback signal to the gain control circuit 14 as shown in Figure 1 thereof and reproduced below:



Hideaki, Figure 1.

Although the Hideaki reference discloses providing a gain control signal that is responsive to a comparison (by comparing circuit 33) of the difference (42) between a reference signal (V32) and a subtraction of a track and hold signal (V43) from a detector output voltage (V41), it does not disclose that the reference signal and the track and hold circuit are representative of a modulation of the *input* signal.

Applicants' invention, however, involves providing a control signal based on signals that are coupled to the input and output of the amplifier as shown, for example, in Figure 1.



Application, Figure 1.

Claim 1 as amended requires, in part, that the track and hold circuit track a measured reference power signal that is representative of a modulation of the input signal, and that the feedback signal is representative of a modulation of the amplifier output signal. The Hideaki reference discloses that the power control signal be supplied by a feedback path that is coupled to the output only of the amplifier. A power control system as claimed in claim 1 that is coupled to the input and output of the amplifier in the relationship as claimed is not taught or suggested in the Hideaki reference. Claim 1, therefore, is submitted to be in condition for allowance. Each of claims 2 – 8 and 10 – 11 depends from claim 1 either directly or indirectly and further limits the subject matter thereof. Each of claims 1 – 8 and 10 – 11 is therefore submitted to be in condition for allowance.

Claim 15 as amended requires, in part, that the reference logarithmic unit is coupled to a reference signal that is representative of a modulation of the input signal, and that the feedback logarithmic unit is coupled to a feedback signal that is representative of a modulation of the amplifier output signal. As discussed above, the Hideaki reference does not disclose that the reference signal (and the track and hold circuit coupled thereto) are representative of a modulation of the *input* signal. The Davidson reference discloses a feedback loop level control circuit for an RF source that integrates a difference between the output signal and a reference signal in an integrate-and-hold switch (355). The circuit also includes a log amplifier 314 and a log amplifier 332, the output of which is combined with a reference voltage by a summer 330, which is combined with an output of the integrate and hold switch by a summer 382. The Davidson reference, however, also does not disclose a power control system that is coupled to the input and output of the amplifier. Claim 15, therefore, is submitted to be in condition for allowance. Each of claims 16 - 21 depends from claim 15 either directly or indirectly and further

limits the subject matter thereof. Each of claims 1 – 8 and 10 – 11 is therefore submitted to be in condition for allowance.

Each of claims 1 – 8 and 10 - 21, therefore, is in condition for allowance. Favorable action consistent with the above respectfully requested.

Respectfully submitted,



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